

**INPLACE MOISTURE-DENSITY DETERMINATION:
RUBBER BALLOON METHOD
Fine-Grained Soils — Less than 5% + No. 4 Sieve**

Location _____ Site No. _____

Watershed _____ Subwatershed _____

Contract No. _____ Contractor _____

Tested by _____ Computed by _____ Checked by _____

Test No.	Date	Location of test			Borrow source, location, and depth	Material classification
		Station	± offset	Elevation		

Test No.	Date	Spec. requirements (%)		Test results (%)		Curve No.	Wet density check	
		Moisture range	Compaction	Moisture	Compaction		1-Point	Curve

Remarks _____

Volume Determination	Test No.			
1. Final base reading _____				
2. Initial case reading _____				
3. Volume of hole = (1) - (2) _____				

Moisture Determination				
Speedy moisture meter				
4. Dial reading _____				
5. Moisture content (calibration curve) _____ (%)				
Sample tested using: quick dry <input type="checkbox"/> alcohol <input type="checkbox"/> oven <input type="checkbox"/>	Can No.			
6. Weight of moist sample plus container _____				
7. Weight of dry sample plus container _____				
8. Weight of moisture = (6) - (7) _____				
9. Weight of container _____				
10. Weight of dry sample = (7) - (9) _____				
11. Moisture content = ((8) + (10)) 100 _____ (%)				
12. Correction for ignition _____ (%)				
13. Corrected moisture content = (11) - (12) _____ (%)				

Density Determination				
14. Weight of moist sample plus container _____				
15. Weight of container _____				
16. Weight of moist sample = (14) - (15) _____				
17. Weight of dry sample = [(16) + (100 + (13))] 100 _____				
18. Fill dry density = (17) + (3) _____				
19. Maximum dry density _____				
20. Ratio ¹ = ((18) + (19)) 100 _____ (%)				

¹ Ratio of fill dry density to maximum dry density.

Indicate Weight and Volume Units Used in Test